Applicant : Takeshi Ishida et al.
Serial No. : 10/551,583
Filed : September 29, 2005
Page : 6 of 10

Attorney's Docket No.: 19291-0004US1 / MEC0929/C-
678US

REMARKS

Claims 1-10 have been canceled. Claims 11-18 are new. Support for the new claims can be found in the canceled claims and throughout the specification. No new matter has been added.

Claims 1-10, which have been canceled, were rejected under 35 U.S.C. §103(a) as unpatentable over U.S. Patent No. 5,301,786 (Yoshihara) in view of U.S. Patent No. 5,214,470 (Denber). Since claims 1-10 have been canceled, these rejections are moot.

Pending claims 11-18 should be allowable over the cited references for at least the following reasons.

Claim 11 recites: (1) means for discriminating an image that exists in sheet-paper-present image data in the same position and over the same area as an image in a sheet-paper-absent image data measurement as an unwanted image; and (2) means for: (a) attaching the unwanted image so discriminated to standard data found beforehand from genuine sheet paper in the same position and over the same area as the unwanted image, and (b) identifying the authenticity of the sheet paper by comparing standard data to which the unwanted image is attached with the sheet-paper-present image data.

An example of the foregoing claim features can be appreciated with reference to FIG. 2 of the present application, in which (1) the dust detection section 8 discriminates an image (*e.g.,* an image of dust) that exists in sheet-paper-present image data in the same position and over the same area as an image in a sheet-paper-absent image data measurement as an unwanted image; and (2) an authenticity judgment section 15 for: (a) attaching the unwanted image (*i.e.,* the image of dust) so discriminated to standard data (from template 14) found beforehand from genuine sheet paper in the same position and over the same area as the unwanted image, and (b) identifying the authenticity of the sheet paper by comparing the standard data to which the unwanted image is attached with the sheet-paper-present image data.

Applicant : Takeshi Ishida et al.
Serial No. : 10/551,583
Filed : September 29, 2005
Page : 7 of 10

Attorney's Docket No.: 19291-0004US1 / MEC0929/C-678US

In some implementations, the claimed subject matter helps prevent the occurrence of errors in authenticating sheet paper, such as paper currency, particularly when dust or other obstructions are present inside an image pick-up means. As discussed below, neither the Yoshihara patent, nor the Denber patent, nor any reasonable combination thereof, discloses or renders obvious the claimed subject matter.

The Yoshihara patent discloses an apparatus for validating a paper-like piece. The apparatus includes a detection section 1, a reference level data providing section 2, a standard pattern providing section 3, a data-to-be-examined section 4 and a determination section 5. *See* FIG. 1. The standard pattern providing section 3 provides a predetermined standard pattern corresponding to a pattern of a paper-like piece to be examined. The predetermined standard pattern is provided as a ratio to or deviation from reference level data. *See* Col. 6, line 56-61. The data-to-be-examined providing section 4 converts a detection signal produced by the detection section 1 in response to deposition of a paper-like piece to a ratio to or deviation from the reference level data and provides this ratio or deviation as data to be examined. *See* col. 7, lines 3-7. The determination section 5 determines whether a deposited paper-like piece is true or false by collating the data-to-be-examined with the standard pattern. *See also* col. 9, line 37 – col. 11, line 7 and FIGS. 1 and 7-9.

The Yoshihara patent clearly does not disclose: (a) attaching an unwanted image (*e.g.*, a image of dust) to standard data found beforehand from genuine sheet paper in the same position and over the same area as the unwanted image, and (b) identifying the authenticity of the sheet paper by comparing standard data to which the unwanted image is attached with sheet-paper-present image data, as recited in claim 11.

Applicants note that the "reference level data" disclosed in the Yoshihara patent does not correspond to the "unwanted image" of claim 11, as the Office action seems to suggest. Indeed, it does not get attached to standard data to produce a composite image that is compared with sheet-paper present image data, as recited in claim 1. Instead, the "reference level data" is used merely to normalize the predetermined standard pattern and the data-to-be-examined.

Applicant : Takeshi Ishida et al.
Serial No. : 10/551,583
Filed : September 29, 2005
Page : 8 of 10

Attorney's Docket No.: 19291-0004US1 / MEC0929/C-678US

Furthermore, the Yoshihara patent does not disclose discriminating an image that exists in sheet-paper-present image data in a same position and over a same area as an image in a sheet-paper-absent image data measurement as an unwanted image, as recited in claim 11. Indeed, the Office action does not appear to suggest anything to the contrary.

Nor does the Denber patent, alone or in any reasonable combination with the Yoshihara patent, disclose or render obvious the claimed subject matter.

The Denber patent discloses a technique, in which a platen is first scanned without a document placed thereon and an electronic image is generated that contains information on the location of a dirt spot. *See* Abstract. Upon initiation of a scan with a document placed on the platen, the scanned electronic document image is subjected to a logical exclusive OR process to correlate the previously stored spot location with the same location on the document image which is generated and stored. Once the spot location is determined, the spot is erased.

The Denber patent clearly does not disclose discriminating an image that exists in sheet-paper-present image data in the same position and over the same area as an image in a sheet-paper-absent image data measurement as an unwanted image (*e.g.*, an image of dust), attaching the unwanted image to standard data from genuine sheet paper in the same position and over the same area as the unwanted image, and identifying the authenticity of sheet paper by comparing standard data to which the unwanted image is attached with sheet-paper-present image data, as recited in claim 11.

Applicants note that if a document moving through the scanning device of the Denber patent were to remove a dirt spot from the platen, the scanning device likely would have determined incorrectly that the dirt spot was still present and would have erased a portion of resulting image even though erasure would not have been needed. In contrast, in a typical implementation of the claimed subject matter, if a document (*i.e.*, a sheet paper) moving through the image data acquisition means were to remove a dirt spot from the image data acquisition means, the apparatus would not incorrectly determine that a dirt spot was present.

Moreover, the Denber patent relates to compensating for dirt or etched areas on a document platen, so as to prevent the reproduction of the dirt or etched area in an output copy. A

Applicant : Takeshi Ishida et al.
Serial No. : 10/551,583
Filed : September 29, 2005
Page : 9 of 10

Attorney's Docket No.: 19291-0004US1 / MEC0929/C-
678US

person of ordinary skill, therefore, would not have considered it obvious to apply the techniques disclosed in Denber to preventing erroneous identification of sheet paper, such as paper currency, due, for example, to the accumulation of dust inside an image pickup section.

Claim 11 should be allowable for at least the foregoing reasons.

Claims 12-14 depend from claim 11 and, therefore, should be allowable for at least the same reasons as claim 11.

Pending claims 15-18 should be allowable over the cited references for at least the following reasons.

Claim 15 recites subject matter similar to the subject matter discussed above with reference to claim 11. More particularly, claim 14 recites a sheet paper identification method that includes: (1) discriminating an image that exists in the sheet-paper-present image data in the same position and over the same area as an image in sheet-paper-absent image data measured by a measurement means as an unwanted image; and (2) (a) attaching the unwanted image discriminated by the unwanted image discrimination means to standard data found from genuine sheet paper in a same position and over a same area as the unwanted image, and (b) identifying the authenticity of sheet paper by comparing standard data to which the unwanted image is attached with sheet-paper-present image data. As discussed above with reference to claim 11, the cited references, alone or in any reasonable combination, do not disclose or render obvious the claimed subject matter.

Claim 15 should be allowable for at least the foregoing reasons.

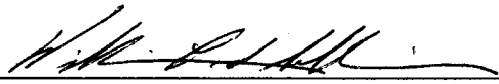Claims 16-18 depend from claim 15 and, therefore, should be allowable for at least the same reasons as claim 15.

It is believed that all of the pending claims have been addressed. However, the absence of a reply to a specific rejection, issue or comment does not signify agreement with or

Applicant : Takeshi Ishida et al.
Serial No. : 10/551,583
Filed : September 29, 2005
Page : 10 of 10

Attorney's Docket No.: 19291-0004US1 / MEC0929/C-678US

concession of that rejection, issue or comment. In addition, because the arguments made above may not be exhaustive, there may be reasons for patentability of any or all pending claims (or other claims) that have not been expressed. Finally, nothing in this paper should be construed as an intent to concede any issue with regard to any claim, except as specifically stated in this paper, and the amendment of any claim does not necessarily signify concession of unpatentability of the claim prior to its amendment.

No fee is believed to be due. Please apply any charges or credits to deposit account 06-1050.

Respectfully submitted,

Date: _December 18, 2008_

William P. O'Sullivan
Reg. No. 59,005

Fish & Richardson P.C.
Citigroup Center
52nd Floor
153 East 53rd Street
New York, New York 10022-4611
Telephone: (212) 765-5070
Facsimile: (877) 769-7945

30451051.doc